

maximum molecular weight of approximately 69kDa and is a pro MMP-2 activating factor, said partial peptide or salt thereof comprising continuous antigenic amino acid residues of SEQ ID No: 2 which are characteristic of said MMP protein.

Claim 41. (Amended) The antibody according to claim 36, wherein the antibody specifically binds to said partial peptide or salt thereof.

Claim 45. (Amended) A method for producing an antibody, which comprises:

immunizing an animal with an antigen selected from the group consisting of a matrix metalloproteinase (MMP) protein or a salt of said MMP protein, or a partial peptide of said MMP protein or a salt of said partial peptide, said matrix metalloproteinase protein or salt thereof comprising the following peptide fragments of SEQ ID No: 2: (a) Gly¹⁰⁹ to Arg¹¹⁹, (b) Pro¹⁷¹ to Gly¹⁷⁸, (c) Thr²²⁹ to Leu²⁴² and (d) Asp⁵³³ to Val⁶⁰⁷, said matrix metalloproteinase protein having a maximum molecular weight of approximately 69kDa and is a pro MMP-2 activating factor, said partial peptide or salt thereof comprising continuous antigenic amino acid residues of SEQ ID No: 2 which are characteristic of said MMP protein, and

isolating an antibody which specifically binds to said antigen.

Claim 46. (Amended) A method for producing an antibody, which comprises:

immunizing an animal with an antigen selected from the group consisting of a matrix metalloproteinase (MMP) protein or a salt of said MMP protein, or a partial peptide of said MMP protein or a salt of said partial peptide, said matrix metalloproteinase protein or salt thereof comprising the following peptide fragments of SEQ ID No: 2: (a) Gly¹⁰⁹ to Arg¹¹⁹, (b) Pro¹⁷¹ to Gly¹⁷⁸, (c) Thr²²⁹ to Leu²⁴² and (d) Asp⁵³³ to Val⁶⁰⁷, said matrix metalloproteinase protein having a

maximum molecular weight of approximately 69kDa and is a pro MMP-2 activating factor, said partial peptide or salt thereof comprising continuous antigenic amino acid residues of SEQ ID No: 2 which are characteristic of said MMP protein, to obtain an antibody-producing cell which produces an antibody which specifically binds to said antigen,

fusing said antibody-producing cell with an immortal cell, and
selecting an immortal hybrid cell which produces a monoclonal antibody which specifically binds to said antigen.

Claim 47. (Amended) A method for detecting and/or measuring a matrix metalloproteinase protein or salt thereof, which comprises:

contacting a test sample with an antibody which specifically binds to a matrix metalloproteinase (MMP) protein or a salt of said MMP protein, or a partial peptide of said MMP protein or a salt of said partial peptide, said matrix metalloproteinase protein or salt thereof comprising the following peptide fragments of SEQ ID No: 2: (a) Gly¹⁰⁹ to Arg¹¹⁹, (b) Pro¹⁷¹ to Gly¹⁷⁸, (c) Thr²²⁹ to Leu²⁴² and (d) Asp⁵³³ to Val⁶⁰⁷, said matrix metalloproteinase protein having a maximum molecular weight of approximately 69kDa and is a pro MMP-2 activating factor, said partial peptide or salt thereof comprising continuous antigenic amino acid residues of SEQ ID No: 2 which are characteristic of said MMP protein, and

detecting and/or measuring the matrix metalloproteinase protein or salt thereof bound to the antibody.

Claim 48. (Amended) The method according to claim 47, wherein the antibody is labelled.